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Culture is an important component, which can contribute to our understanding of human behavior and individual differences in that behavior. According to studies, culture is one of the key factors to enhance our understanding of motivation in physical activity (PA) settings. Cultural differences can influence the motivational climate of PA, which also affects one's perception of achievement motivation. Despite its importance, cultural diversity is rarely examined in a sport and exercise psychology context. This study is designed to draw attention to the potential influence of culture on physical activity behavior and to relate family interaction models relative to individualism and collectivism to a sport and exercise psychology context.

This study examined motivational behavior of Turkish and American students physical activity participation. A survey was implemented to compare student's family interaction type, their basic psychological needs in exercise, PA level and goal orientation types.

Analyses revealed that there were significant differences between groups such that American students were more autonomous and more physically active than Turkish students. The results of this sample demonstrate that cultural differences may have a role in PA participation and further examination is needed.

THE EFFECTS OF CULTURAL DIFFERENCES ON MOTIVATION
GOAL THEORY IN PHYSICAL ACTIVITY
SETTINGS

by

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Approved by

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APPROVAL PAGE

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CHAPTER I

INTRODUCTION

Motivation, which is defined as the drive to initiate behavior, is accepted as an essential requisite for physical activity (PA). A common point of theories of motivation in exercise and sport psychology is that people are motivated to achieve and show their ability (Gill & Williams, 2008; Hayashi 1996). The motivation to achieve and show one's ability can be affected by personal and situational factors and there are several theoretical frameworks that consider both factors (Hayashi, 1996; Kim & Gill, 1997; Taylor & Lonsdale, 2010).

Nicholls's (1989) approach puts an emphasis on personal factors. According to his model, people strive to show their ability when performing a specific skill. However, it is important to understand an individual's definition of ability to understand what this means from a behavioral standpoint. Some people feel that they demonstrate their ability by learning and improving a skill; others feel that they show their ability by outperforming others. Nicholls referred to these perspectives as orientations and described these two definitions of ability as task orientations and ego orientations. A task-oriented person is motivated to learn and focuses on mastery of the skill. The person will be satisfied when there is improvement. For an ego-oriented person, learning is not the primary goal. The person is motivated to do better than others. The individual will value

outperforming others. The success or failure depends on how well the person performs relative to the opponent regardless of the mastery of the skill.

Ames (1992) proposed a model that emphasizes the importance of social context and situational factors on motivation. According to this model, people's perceptions of success depend on reward structures that are implicit in the performance environment. Thus, the required goals in a particular setting actually determine an individual's achievement pattern. An environment that rewards skill enhancement and improvement is a mastery-based climate. In this context, individuals will be more likely to act in a task-oriented way because skill enhancement is the desired goal. In contrast, a performance-based climate rewards individual who are outperforming the opponent. Social comparison is stressed in this context. In a performance-based climate, where winning is valued, people are more likely to act in an ego-oriented way.

In a PA context it is not logical to only study personal or situational factors because both personal factors (i.e., achievement goal orientation) and situational factors (i.e., motivational climate) affect people's motivation (Fontayne, Sarrazin, & Famose, 2001; Hayashi, 1996). One additional and key factor that may be relevant to both of these determinants of motivation is culture. As shown in previous studies, cultural differences can influence the motivational climate of PA settings, which also affects one's perception of achievement motivation. In this sense, cultural perspectives influence personal and situational factors of motivation in PA (Fontayne, Sarrazin, & Famose, 2001; Gill & Williams, 2008; Kim & Gill, 1997). As a result, individual's goal orientation and perceived motivational climate can be culture specific (Hayashi, 1996).

The contextual differences in cultures are conceptualized through two patterns in social psychology research: individualism and collectivism. Kagitcibasi (2005) explained that the definition of self is determined according to these cultural patterns.

An individualistic culture values independence, autonomy, self-reliance, and uniqueness. This is a cultural model observed in Western countries such as in North America and Western Europe. In individualistic cultures, the construct of self is identified as independent, autonomous, and self-reliant. In this cultural context, achievement is considered a personal success. In contrast, in collectivistic countries achievement is considered as the group's success because a collectivistic country values communality, shared goals, and group cohesiveness. This is a model seen in Latin America, Asia, Africa and the Middle East. These countries are collectivistic and represent Eastern cultures. In this case, the construct of self is defined as dependent, related, and loyal (Fontayne, Sarrazin, & Famose, 2001; Hayashi, 1996; Kagitcibasi, 2005; Shafizadeh, 2007).

Even though cultural diversity is rarely investigated in the field of sport and exercise psychology (Gill, 2007), these cultural differences (i.e., individualism, collectivism), which are commonly investigated in social psychology research, can also affect physical activity behavior. In this regard the researcher is interested in examining the influence of cultural differences on people's goal orientation in PA settings.

Culture is a complex and dynamic construct that exists along a continuum and cannot be strictly labeled (Gill, 2007). The importance is in the relative weight that each culture puts on individualism versus collectivism. The continuum concept can also be

transferred to an individual level within each culture: people raised in Western countries tend to be more individualistic giving importance to autonomy and independence and people raised in Eastern countries tend to be more collectivistic giving importance to relatedness and communality (Hayashi, 1996; Kagitcibasi, 2009). One question that is of interest is whether or not there is an optimum spot along this continuum, which contributes to a person's motivation to be PA.

A related theory that may help to conceptualize how culture impacts physical activity behavior is self-determination theory. According to self-determination theory (SDT), autonomy, relatedness, and competence are basic psychological needs that must be experienced simultaneously in order for a person to be motivated and function in an optimal way (Hagger & Chatzisarantis, 2008). Competence is a state of being well qualified in a specific skill. Individuals should feel competence in order to be motivated. Autonomy is being able to make decisions without any outside control, self-directing, or self-governing. So, individuals perceive their behaviors to be self-regulated, intentional, and volitional. Relatedness is a feeling of belongingness in a group. People need to feel that they are cared for by others to stay motivated in physical activity settings (Hagger & Chatzisarantis, 2008; Ryan, Williams, Patrick & Deci, 2009). So, autonomy, competence, and relatedness may be important factors relevant to a person's motivation in physical activity settings.

Kagitcibasi (2005) explains that there is a conceptualization problem in previous studies in terms of the basic needs of SDT and cultural differences. In these studies, it has been assumed that the Western cultures mainly emphasize autonomy while Eastern

cultures mainly emphasize relatedness. On the other hand, SDT predicts that autonomy and relatedness are needed simultaneously for people to function in an optimum way. So, the question becomes “How can people experience these needs concurrently in different cultural perspectives?” Kagitcibasi explains that autonomy is usually confused with being an independent agent – one who is separate from others – and this is seen as a characteristic of Western cultures. In contrast, relatedness is confused with interdependence and seen as a characteristic of Eastern countries. However, according to Kagitcibasi (2005), a person can autonomously decide to depend on someone else or not to depend on someone else. So, autonomy does not necessarily refer to independency and people can actually experience the basic needs of autonomy and relatedness simultaneously. In this sense, autonomy is not experienced at the expense of relatedness and vice versa. There are two distinctive dimensions underlying these constructs that can help to clarify this idea (see Figure 1, page 15). One is the interpersonal distance dimension, which ranges from relatedness to separateness. This dimension shows the connectedness level of the individual with others. Second is the agency dimension, which ranges from autonomy to heteronomy. Agency is a dimension that encompasses the level of autonomy. One end of the continuum is autonomy: self-governing. The other end is heteronomy: governed by others.

Kagitcibasi (2009) explained that traditional family models are defined in two categories. One is the independent family model that encompasses the independent or autonomous-separated self typically observed in Western countries. Second is the interdependent family model that encompasses the interdependent or heteronomous-

related self typically observed in Eastern countries. However, Kagitcibasi (2009) suggested there is a new form of family interaction – the psychologically interdependent family model- that encompasses the autonomous-related self.

It is undeniable that working conditions and lifestyles across the world are moving towards a Western style of business. This shift in life conditions is forcing people to be more autonomous economically. As a result, autonomy is endorsed in child rearing even in collectivistic societies. Kagitcibasi (1970) demonstrated the emergence of this shift in a study called value of children (VOC). Interviewing more than 20,000 parents in nine different countries, the author determined three main values given to children. The economic value signifies children's financial input to the household. The psychological value embodies the need to love and be loved by children. The traditional value represents social pressure to reproduce and preserve the last name. According to the study, the economic VOC was significantly higher in Eastern countries than Western countries. However the findings showed differences in terms of urbanization within Eastern countries. The economic VOC was significantly less in urban areas compared to rural areas in Eastern countries. Children raised in urban areas were not expected to contribute to the household, which allows children autonomy. Children are responsible for themselves financially.

However, the psychological VOC was the same in urban and rural areas within the Eastern countries. These results showed that emotional interdependencies and relatedness remain the same regardless of socioeconomic development. So, Kagitcibasi integrated the initial two models of family interactions, independent and interdependent,

and proposed the family model of psychological interdependence in order to explain this new type of interaction among family members. In this new form, members are independent in terms of business and academics. They make decisions autonomously and take care of themselves financially. However they are still related to family members emotionally and adhere to traditional values. Kagitcibasi associated different types of selves with family models (see Figure 2, page 19). According to Kagitcibasi (2009) the autonomous-related self is helpful in healthy development because it satisfies both autonomy and relatedness needs. Also, the autonomous-related self is simply adaptive for emerging lifestyles related to industrialization, globalization and technological development. For example, relatedness is needed for healthy socialization, human relations and networking, while autonomy is needed for decision-making and goal setting.

This new model of family interaction is also in accord with the basic psychological needs theory of SDT. SDT explains that humans will function effectively when autonomy, relatedness, and competence needs are fulfilled. Also research shows that these skills are important for physical activity settings. Relatedness is needed for cooperation and team spirit. Autonomy is needed for carrying out goals and decision-making. For example, Taylor and Lonsdale (2010) examined children's motivation in physical education classes across Hong Kong and England. They used the components of SDT and claimed that a mastery-based climate that fosters children's basic needs would positively affect their effort in class. Findings demonstrated that students who had higher perceptions of SDT elements had significantly higher scores on vitality and effort. The

study showed that when the three basic needs of SDT are fulfilled in physical education, a mastery-based climate was created in the class, children's vitality and effort increased in class, and they acted in a task-oriented way.

In the proposed study, SDT merely provides a bridge to consider how culture and different family interactions within each culture impact physical activity. The researcher is interested in how different family models influence goal orientation in physical activity settings (Hayashi, 1996; Kagitcibasi, 2005; Taylor & Lonsdale, 2010). In light of previous research, this research will investigate college student's physical activity motivation between the independent family model of United States of America (U.S.A.) and the psychologically interdependent family model in urban Turkey.

Research question: Considering physical activity behavior, how do the achievement motivation perceptions of college students raised in an independence family model (as seen in individualistic countries) differ from the achievement motivation perceptions of adolescents raised in a psychologically interdependent family model (as seen in urban areas of collectivistic countries)?

Hypotheses:

(1) American students will be categorized as being in an independence family model and Turkish students will be categorized as being in a psychologically interdependent family model

(2) American students raised in independence family would report more autonomy and less relatedness compared to Turkish students raised in psychologically interdependent model in terms of family interaction type

(3) Students raised in independence family model would be more ego-oriented in their physical activity participation in comparison to students raised in psychologically interdependent family model.

(4) Students from independence family and psychologically interdependent family would differ on basic needs of SDT: Americans would have higher levels of autonomy while Turkish students would have higher levels of relatedness.

(5) Physical activity levels would differ as a function of being from an independent family model vs. being from a psychologically interdependent family model.

(6) Goal orientation type would predict PA level in a way that task orientation would lead to higher levels of PA

(7) The basic needs of SDT (autonomy, relatedness, competence) would predict PA level

CHAPTER II

EXTENDED LITERATURE REVIEW

Motivation

Previous research related to motivation has focused on how people are motivated in sports settings, the reasons why people are motivated, the different levels of motivations in individuals, and the best type of motivation in physical activity settings (Hayashi, 1996; Taylor & Lonsdale, 2010). Motivation is a broad area of psychology that encompasses numerous theories and research areas (Kim & Gill, 1997).

Achievement goal theory includes both personal and situational factors. Nicholls's (1989) achievement goal theory perspective puts emphasis on personal factors. Nicholls's (1989) model includes two different goal orientations. The first is a task goal orientation, which describes individuals who use self-referenced criteria and are focused on working hard to learn and improve a particular skill. They want to become an expert at that particular skill. The benchmark is the individual and advancement is the key to success. Their main focus of attention is personal development. The second is an ego goal orientation, which describes individuals whose main focus is performing better than their opponents. Regardless of the level of skill mastery, excelling beyond the achievements of their opponents is the measure of success. These people are concerned with comparing themselves to others and use this to gauge their success or failure (Fontayne, Sarrazin, & Famose, 2001; Kim & Gill, 1997; Zahariadis & Biddle, 2000).

Ames's model (1992), on the other hand, stresses the situational factors. Ames emphasizes the influence of reward structure and motivational climate on achievement. Reward structure is defined as a setting that affects an individual's evaluation of success. So, the reward structure is affecting the motivational climate of physical activity settings. There are two types of motivational climate: the mastery-based climate and the performance-based climate. A mastery-based climate rewards people for their effort, learning, and improvement. So, people would be expected to be more likely to act in a task-oriented way. A performance-based climate rewards individuals for beating their opponent and stresses social comparison. So, people act in an ego-oriented way (Gill & Williams, 2008; Shafizadeh, 2007). Considering the importance of situational factors, cultural differences may also affect motivation in physical activity settings. Cultural differences can influence the reward structure and people's definition of success. As a result, cultural characteristics can affect the motivational climate of a PA setting (Gagne, Ryan & Bargmann, 2003; Hagger & Chatzisarantis, 2008; Ryan, Williams, Patrick & Deci, 2009).

Culture

Culture is an important component, which can contribute to our understanding of human behavior and individual differences in that behavior. Culture embraces elements such as values, language, ethnicity, nationality, and religion. In this sense culture is a component, which can contribute to the understanding of individual differences. However, Gill (2007) pointed out that cultural diversity is rarely examined in a sport psychology context. Despite their importance, relatively few cross-cultural studies exist

in the psychology literature and research is even scarcer in the sport and exercise psychology field (Fontayne, Sarrazin, & Famose, 2001; Gill, 2007; Hayashi, 1996; Isogai et al. 2003; Taylor & Lonsdale, 2010). Therefore this study is intended to focus on the relationship between cultural differences and motivation for physical activity-related behavior.

Culture is conceptualized within the framework of individualism and collectivism (Sagie, Elizur & Yamauchi, 1996; Kagitcibasi, 2005; Taylor & Lonsdale, 2010). According to this framework, countries such as the United States of America, Canada, New Zealand, and Australia are individualistic and countries such as Turkey, Japan, Korea and China are collectivistic (Fontayne, Sarrazin, & Famose, 2001; Hayashi, 1996; Kagitcibasi, 2005). Individualistic countries are described as egocentric societies and they generally give importance to individual goals. Therefore, the self is identified as independent in these countries. In contrast, collectivistic countries are more group-oriented societies and they value communality and group goals. So, the self is identified as interdependent in these countries (Kagitcibasi 2005; Sagie, Elizur & Yamauchi, 1996). Previous studies indicate that people who are raised within an individualistic culture are independent. In contrast, people who are raised within a collectivistic culture are interdependent (Sagie, Elizur & Yamauchi, 1996; Hayashi, 1996).

Hayashi (1996) hypothesized that there is relationship between the cultural characteristics of individualism and collectivism and the two goal orientations of achievement motivation in physical activity settings. In particular, people who are raised in societies, which promote individualism, are expected to be more ego-oriented, whereas

people who are raised in societies which promote collectivism are expected to be more task-oriented.

However, Gill and Williams (2008) indicated that people, behaviors, sport settings and culture are highly complex and dynamic. It is not easy to measure these constructs. There are not strict boundaries that separate individualism/collectivism and ego-oriented/task-oriented. These constructs exist along a continuum and may be relevant to different aspects of life. For example, a society or an individual may have an individualistic characteristic in business life while having a collectivistic characteristic in family life (Gill & Williams, 2008; Kagitcibasi, 2005).

Conflicts in cultural theories

As Kagitcibasi (2005) pointed out, there are conflicts in terms of defining independency versus interdependency of individuals. Kagitcibasi (2005) explained that independence is often confused with autonomy because autonomy is typically associated with distancing yourself from others and acting according to one's will. Kagitcibasi explains that traditional theories, for example Freud's psychoanalytic theory, usually stress individualism, an appropriate separation from parents, self-sufficiency, and self-efficacy for a healthy development. This view represents the individualistic perspective where autonomy encompasses two different meanings: being your own agent and being separated. Being your own agent (or agency) means self-governing and behaving deliberately while being separate is having a personal distance from others. However Kagitcibasi explains that agency and interpersonal distance are actually two different dimensions and they should be evaluated distinctly. The agency dimension ranges from

autonomy to heteronomy; interpersonal distance ranges from separateness to relatedness. According to Kagitcibasi, this failure to recognize that there are two dimensions relevant to understanding individualism might be a reason why conventional theories do not emphasize the value of relatedness and communality (Kagitcibasi, 2005).

Recent theories, such as self-determination theory (SDT), suggest an alternative perspective to previous theories by explaining that people need both autonomy and relatedness (Kagitcibasi, 2005). SDT explains that the three basic needs of humans are autonomy, relatedness, and competence. Also the theory emphasizes that humans will function effectively and become motivated only if these three basic needs are fulfilled (Ryan, Williams, Patrick & Deci, 2009; Taylor & Lonsdale, 2010).

The conflict is that the traditional view sees the healthy human model as autonomous, separated, and independent from others whereas SDT explains that a healthy human should experience autonomy, relatedness, and competence simultaneously. Research conducted in Western countries (which are individualistic countries) stresses autonomy and competence while under-prioritizing the role of relatedness (Hayashi, 1996). Thus, autonomy is often confused with independence and seen as congruent with healthy development while relatedness is often confused with dependence and seen as a weakness (Kagitcibasi, 2005). However, based upon the proposal that autonomy and separateness are independent constructs, people can decide to be related to another person in an autonomous way.

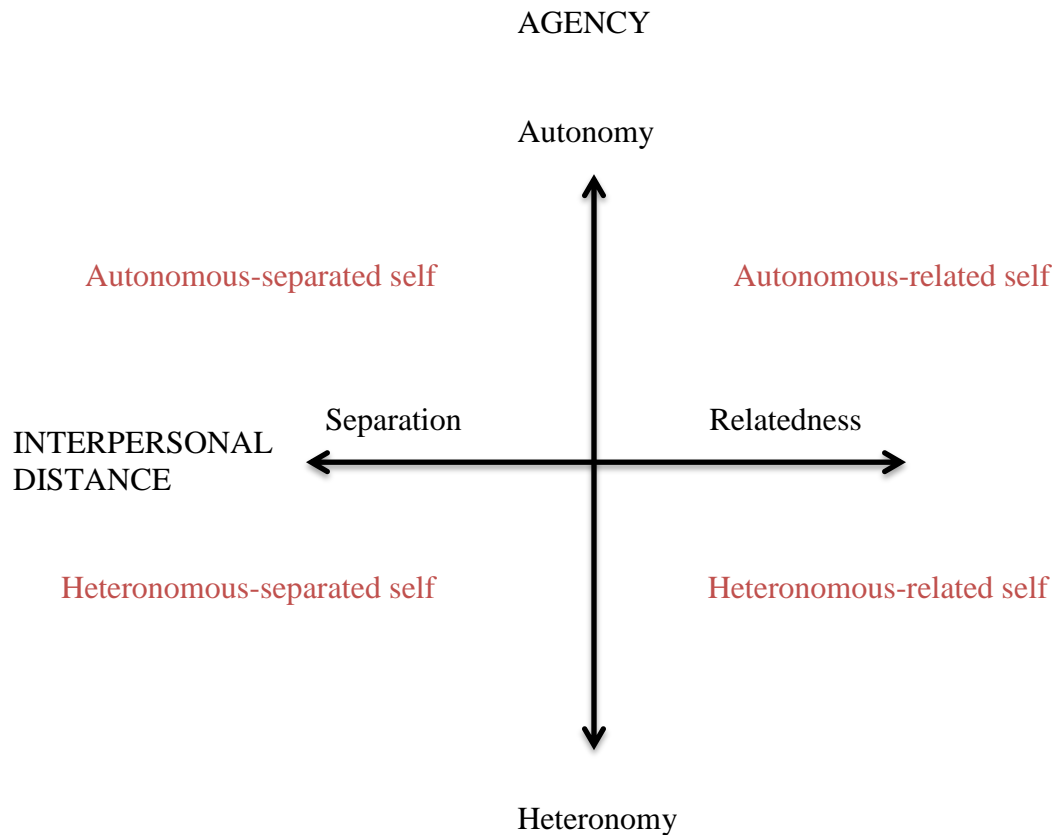


Figure 1. Four different type of selves

This figure illustrates that there are four potential selves depending on the level of autonomy and relatedness. This is an illustration to facilitate the understanding of the dimensions of agency and interpersonal distance. These should not be interpreted as definite constructs. Autonomous-separated self is typical for individualistic cultures while heteronomous-related self is typical for collectivistic cultures. Autonomous-related self is the one introduced by Kagitcibasi (2005). The remaining self (heteronomous-separated) may occur in individuals who do not have any sense of relatedness (belongingness to a group).

Family theories

Because the family is the smallest unit of society, it provides a perfect context in which to study interaction differences among family members in both individualistic and

collectivistic cultures (Fredericks & Eccles, 2005). Families can be identified as following one of the two basic models. One is the model of independence where the self is separated from family members. This is a typical model seen in individualistic (or Western) cultures. Members of independent families may stress the basic need of autonomy during interactions. The other model is one of interdependence where the self is connected to family members. This is a typical model seen in Eastern cultures. Members of interdependent families may stress the basic need of relatedness (Kagitcibasi, 2005). So, each family model emphasizes different needs that are viewed as important when interacting with others. Kagitcibasi (2005) explained that globalization and Western dominance is actually changing the typical Eastern family model. Members of families in Eastern cultures are becoming more economically independent while sticking to their old values and habits emotionally. Therefore, a new form of family interaction is emerging. Kagitcibasi (2005) described this new form of interaction as the family model of psychological interdependence. In this model of psychological interdependence, each member of the family is autonomous but is also related.

Kagitcibasi (1970) conducted a study examining the motivation of having children and values given to children. The project was called value of children (VOC) and included nine countries. There were individualistic countries such as the United States and Germany and also collectivistic countries such as Thailand, Korea, Turkey, and Taiwan. In the VOC project, approximately 20,000 married participants were interviewed in order to understand the reasons behind why people want children and the value couples give to their children. The findings of this research showed that there are

three essential values given to children by their parents. First, the economic/utilitarian value which results because children work and contribute financially for the household expenses. In this value system, children are also seen as providing security during old age for the parents. Second, the psychological value that results because parents feel happiness and joy with children. This reflects the value of loving and feeling loved by children. The last is the traditional value of children that concerns the societal pressure for reproduction and the continuation of the last name. This pressure makes sons more important because males generally can transfer the last name to their offspring (Aycicegi-Dinn & Kagitcibasi, 2010).

According to the VOC project, the economic value of children was significantly more important in less developed/collectivistic countries than developed/individualistic countries. Interestingly, the study revealed differences within the collectivistic countries. For example, in rural areas of Turkey where socioeconomic development is low, the economic VOC was reported to be higher compared to the urban areas of Turkey where socioeconomic development is high. So, the results support a negative correlation such that as economic standards increase, utilitarian VOC decreases. Meanwhile psychological VOC remained equivalent in urban and rural areas within the collectivistic countries. Thus, the findings of this study were interpreted as providing support for the contention that there is a new interaction style among family members in which individualism is emphasizes for financial issues, but collectivism is emphasized for other family matters (Aycicegi-Dinn & Kagitcibasi, 2010).

The purpose of this research is to examine the effects of different family models on motivation in physical activity settings. Psychological interdependence and independence will be taken into account while investigating the two basic needs of SDT – autonomy and relatedness.

In recent research, the basic needs of SDT have been considered components, which can affect motivation in physical activity in a positive way (Ryan, Williams, Patrick & Deci, 2009). For example, researchers have investigated the effects of motivational climate on basic needs as defined by SDT. A mastery-based climate is expected to fulfill the three basic needs of SDT and create desire in exercise behavior (Taylor & Lonsdale, 2010). SDT explains that a task orientation will promote sustainability in exercise behavior, while an ego orientation will lead to maladaptive physical activity patterns for individuals (Hagger & Chatzisarantis, 2008).

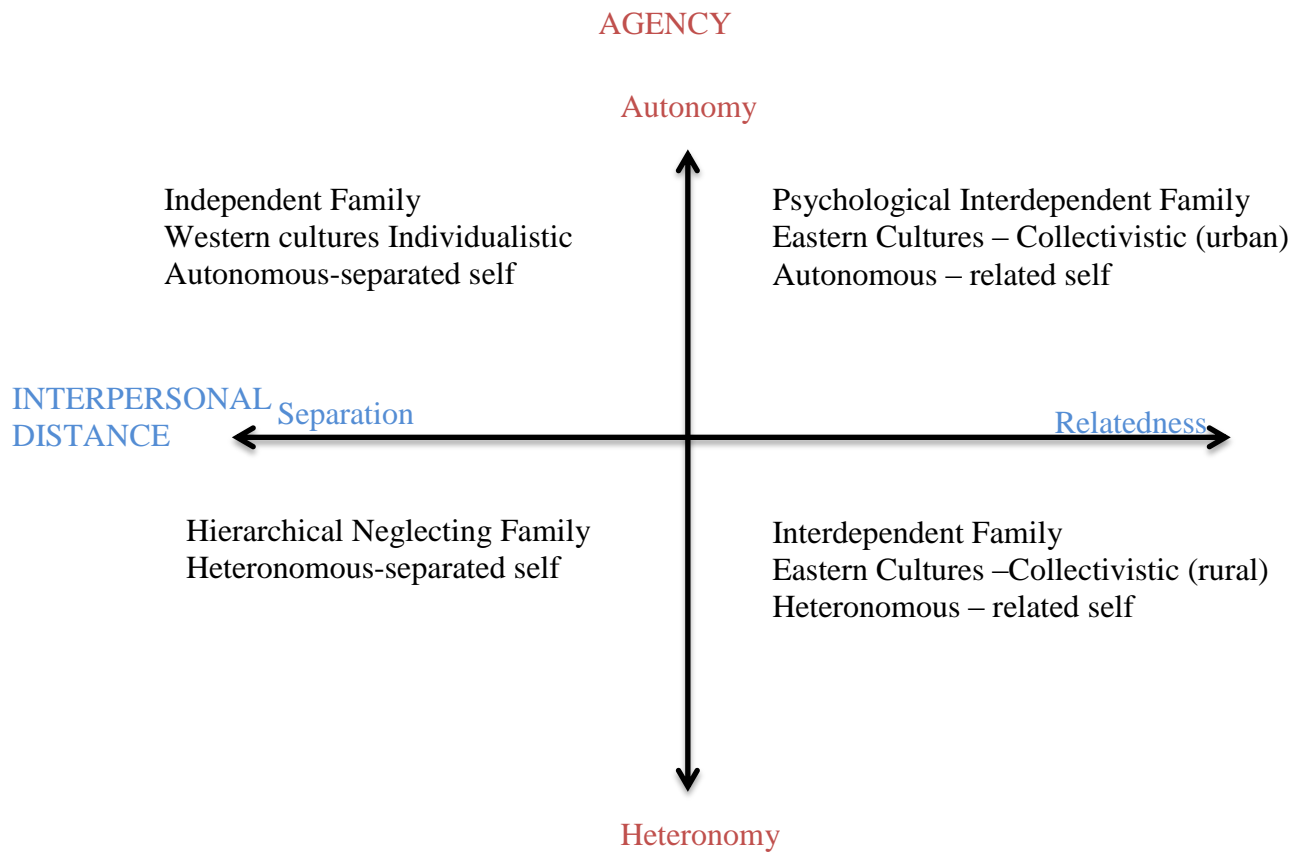


Figure 2. Different types of selves with family interactions models

Taylor and Lonsdale (2010) were interested in determining children's drive in physical activity participation across different cultures. They used the components of SDT to develop their hypothesis. As they wanted to translate this theory into practice, they decided to explore physical education settings. Taylor and Lonsdale examined Hong Kong and British children in a physical education environment to observe the effects of SDT in two different cultures. The universality of the theory was also investigated. They

measured multiple factors such as perceptions of autonomy support, psychological need satisfaction, subjective vitality, and effort. Subjective vitality was defined as positive emotion, vigor and, drive. Taylor and Lonsdale (2010) claimed that a mastery climate, which ensures that children's basic needs for autonomy, relatedness, and competence are satisfied, would positively affect their subjective vitality and effort in physical activity classes. They used a within- and between-subject design to look at the impact between students and classes. Findings demonstrated that students who had higher perceptions of SDT components also had significantly higher scores on vitality. In addition to this, students who had higher perceptions of competence and relatedness had significantly higher scores on effort in physical activity. The findings pointed out the importance of three basic needs in order to increase vitality and effort in physical education. The findings also demonstrated that there were not cultural differences in terms of basic psychological needs. When basic needs were satisfied, children in both cultures had increased motivation in physical education. These findings were interpreted as supporting the universality of SDT and demonstrate that in two cultures, which differ in terms of the emphasis on individualism and collectivism, there are no differences in ratings on the three constructs of SDT.

Aycicegi-Dinn and Kagitcibasi (2010) conducted a study in which they asked students to predict their parenting styles in the future and the value given to them by parents. The researchers conducted the study with Turkish and American university students. They selected students from three different areas. University students located in urban cities and rural areas of Turkey and university students in an urban city in the

United States. The researchers demonstrated the findings of this study by classifying these different areas according to their developmental level. The least developed region was rural Turkey, the moderately developed region was urban Turkey, and the highly developed region was the United States. Findings showed that when asked about parenting styles, Turkish students in rural areas emphasized economic/utilitarian VOC more than Turkish students located in urban regions. Additionally, American students emphasized economic VOC even less than Turkish students located in urban areas. Also, urban Turkish students weighted psychological VOC as more important than rural Turkish students.

Aycicegi-Dinn and Kagitcibasi (2010) pointed out the effects of family models and parenting styles on value given to children and the impacts of these cross cultural differences on children's developmental process. The aim of this current research is to examine the impact of different styles of family interactions on achievement motivation in physical activity settings.

The researcher hypothesized that students raised in an independence family model would be more ego-oriented in their physical activity participation in comparison to students raised in a psychologically interdependent family model. Another hypothesis was that American students raised in independence family would report more autonomy and less relatedness compared to Turkish students raised in psychologically interdependent family. Also, students raised in the United States would be more ego-oriented in their physical activity participation in comparison to students raised in Turkey. It was also hypothesized that students from America and Turkey would differ on

basic needs of SDT: American students would have higher levels of autonomy scores, while Turkish students would have higher levels of relatedness scores. PA levels would differ in a way that Americans would score higher than Turkish students.

The researcher was also interested to examine if goal orientation type would predict physical activity level in a way that task orientation would lead to higher levels of PA. Also, if the basic needs of SDT (autonomy, relatedness, competence) would predict PA levels.

CHAPTER III

METHODS

The purpose of the study is to investigate the effects cultural differences of motivation on college students in physical activity settings and the influence on PA levels. Students raised in an independence family model (as seen in the United States) and students raised in a psychologically interdependent family model (as seen in urban Turkey) are the target population for this study.

A survey was administered to American and Turkish students in order to explore the different achievement motivation perceptions within each culture.

Participants

In light of previous research, the United States of America (U.S.A) represented the Western individualistic country with mainly independent family models while Turkey served as the Eastern collectivistic country with mainly psychologically interdependent family models in urban areas (Kagitcibasi, 2009; Taylor & Lonsdale, 2010).

University students from the U.S.A and Turkey were the target population for this research. There were 172 participants in total (111 females, 61 males).. Participants were between ages of 18 and 36 years of age ($M = 22.41$, $SD = 4.15$). College students were recruited from two different settings: American college students ($n=80$) in Greensboro, North Carolina, United States (University of North Carolina at Greensboro, UNCG) and Turkish college students ($n=92$) in Istanbul, Turkey (Koc University).

Table 1

Participant Characteristics

	US	Turkey
Gender	29 Male 47 Female	30 Male 62 Female
Race	53% Caucasian 18% African American 2% Asian	100% Caucasian

UNCG is a public, coeducational, doctoral-granting, residential university. It is one of the institutions of The University of North Carolina System with approximately 18,000 students on campus from 49 states and more than 70 countries. Ethnic minority enrollment is about 33 percent. Academically, UNCG is among the best 200 universities of United States with an average SAT score of 1080(<http://admissions.uncg.edu/students-freshmen.php>). Numerous activity courses are available for students. UNCG is located in Greensboro, North Carolina and is relatively a small city of the United States with 750.000 of population.

Koc University is a private, nonprofit institution located in Istanbul. It currently has a student population of over 4,400 and all instruction is in English. Sixty percent of the students receive the equivalent of a 40% full scholarship. Ninety-five percent of full-time faculty members have doctoral degrees from top universities in the United States and Europe. The remaining 5% of faculty members are recruited from Turkish universities. Koc University is the leading university in research and innovation in Turkey with the highest number of national funding in 2010. Academically, Koc University is ranked among the top 10 universities of Turkey. Students have to pass

through a national exam, equivalent to SAT, to get into the university. Koc student's exam scores are between 90 and 95th percentile. The university has exchange programs with over 145 reputable institutions around the world, including the University of Pennsylvania, Georgetown University, Northwestern, Bocconi University, HEC, and Tilburg University and has over 300 hundred exchange students each year. Activity courses are available as an elective for students. Also there is a student recreational center located on campus. Koc University is located in Istanbul, which is the biggest city of Turkey, a metropolitan with 17 million habitants.

When conducting the survey it was specified that family should be considered as the family that you grew up with (for some people this might be one or more parents and siblings but for others this may be grandparents or other caregivers). In this study, participants answered questions with the frame of reference that they are the children of the family. This definition avoided confusion in case there were married participants.

Previous research explained that ethnic minorities and students born in other countries might convey different cultural customs and perspectives and might affect the outcome of cross-cultural studies (Kagiticbasi, 2005; Kagiticbasi, 2009; Longsdale & Taylor, 2010). Therefore, the researcher will run analyses including and excluding ethnic minorities. If ethnic minorities have a significant impact on the findings, they will be eliminated from the research.

Materials

The questionnaire was administered in classroom settings. The questionnaire consisted of six sections: demographic information, the family description questionnaire,

the self in family questionnaire, the Basic Psychological Needs in Exercise Scale (BPNES), the Godin Leisure-Time Exercise Questionnaire (GLTEQ) and the Task and Ego Orientation in Sport Questionnaire (TEOSQ).

The demographic information consisted of participant's gender, age, nationality, ethnicity, and grade level.

The family description questionnaire was specifically designed for this research. The questionnaire was created based upon the definitions of different family types (Kagiticbasi, 2009) and it has face validity. The questionnaire included detailed descriptions of four types of family models; the independent family model (e.g. "I prefer to keep a certain distance in my relationship with my family") the traditional interdependent model (e.g. "I feel very closely attached to my family"), the psychologically interdependent model (e.g. "I feel both independent and emotionally connected to my family") and the hierarchical neglecting family (e.g. "I feel neglected by my family"). The participants were asked to choose the description that best describes his/her family interactions.

Participants also completed another questionnaire to determine the type of selves in family. The self in family questionnaire includes autonomous- and related-self scales. The survey has 18 items in total; 9 of the items measure autonomous self (e.g. "I feel dependent on my family") the remaining 9 items measure the related self (e.g. "Feeling very close to my family is a good thing"). A 5-point likert scale was used for the survey (1= strongly disagree to 5=strongly agree). The reliability of both autonomous- and related-selves scale is 0.84 (Kagiticbasi, 2009). Participants were categorized into family

models based upon their responses on these scales. The self in family scale was used to measure the autonomy and relatedness levels of the student in terms of their family interaction style. A high score on the autonomy scale (>3) with a low score (<3) on the relatedness scale will indicate that a person is in the independent family model. A high score on the relatedness scale (>3) with a low score on autonomy scale (<3) will indicate that a person is in the interdependent family model. High scores on both autonomy and relatedness scales (>3) will indicate that a person in the psychologically interdependent family model and low scores on both autonomy and relatedness (<3) will indicate that a person is in the hierarchical neglecting family model

The psychological needs of SDT were assessed using the basic psychological needs in exercise scale (BPNES). This specific scale consists of three different scales that measure the basic needs of autonomy, relatedness, and competence. The survey has 11 questions in total. Four of the items measure autonomy (e.g. “I feel the way I exercise is a way that I want to”), 4 of the items measure competency (e.g. “I feel exercise is an activity which I do very well”). The remaining 3 items measure relatedness (e.g. “My relationships with the people I exercise with are close”). The reliability of autonomy, competence, and relatedness scales have been reported as 0.75, 0.80, and 0.86, respectively (Vlachopoulos, Ntoumanis & Smith, 2010). The BPNES is a measure specifically designed for exercise settings. The scale was used to measure the three basic needs of autonomy, competence, and relatedness of the student. A total score for each scale was obtained for all participants.

Physical activity was assessed using Godin Leisure Time Exercise Questionnaire (GLTEQ). This is a self-report survey, which asks participants the amount and type of physical activity that they engaged in for more than 15 minutes during a seven-day period. Total score for physical activity was calculated by multiplying weekly rates of strenuous, moderate, and light activities by nine, five, and three, respectively (Godin & Sheppard, 1985). This questionnaire was used to determine the physical activity level of the students.

Each participant's goal orientation in physical activity behavior was measured using the Task and Ego Orientation Scale Questionnaire (TEOSQ). The TEOSQ is a questionnaire that contains task and ego orientation scales. The survey has 13 items of which 7 of the items measure task orientation (e.g. "I feel the most successful in sport when something I learn makes me want to go practice more"). The remaining 6 questions measure ego orientation (e.g. "I feel the most successful in sport when I can do better than my friends"). All participants will answer each item using a 5-point likert scale (1= strongly disagree to 5= strongly agree). The reliability of the ego orientation scale ranges from .71 to .86 and the reliability of the ego orientation scale ranges from .79 to .90 (Kim & Gill, 1997). This questionnaire assessed how the individual defines success in a physical activity setting and was used to determine the goal orientation of the student. The TEOSQ questionnaire was originally designed for sport settings and thus each item includes the word "sport". As the researcher is interested in physical activity settings, the word "sport" was replaced by "physical activity". Physical activity was defined orally at the beginning of the questionnaire as any structured and unstructured activities, including

school-based physical education, recreational activities, dance, going to the gym, college club activities such as volleyball, basketball, soccer, trekking, snowboarding, tennis, kayaking, and active transport such as walking, and biking etc. A total score was obtained from each participant.

Procedure

The questionnaire was not translated into Turkish since Koc University's educational language is English and all courses are held in English.

The study was approved by the Institutional Review Board at UNCG. All approved consent documents were also approved by Koc University in Turkey. The rationale and purpose for the study was presented to each head department in both institutions via e-mail to ask permission from authorities to administer the survey to college students (see APPENDIX F). Psychology students from both UNCG and Koc University completed the questionnaire in class anonymously. Kinesiology student from UNCG also participated in the study. The questionnaire was administered during February and March of 2012, it was the second semester in both universities. The survey had a cover letter where informed consent was obtained from participants (see APPENDIX G). Students were able to complete the questionnaire in 15 to 20 minutes.

Analysis

Demographic information is presented to describe the sample. Cronbach alphas were used to show the reliabilities of the subscales of the various subscales. Analysis of variances (ANOVA) was used to test for differences between American and Turkish

students in constructs of autonomy, relatedness in family type, and ego and task in goal orientations. Furthermore, ANOVAs were performed to test the difference in PA level as a function of nationality (American vs. Turkish) and to see the difference between American and Turkish students in terms of autonomy, relatedness and competence of SDT. Pearson correlations were conducted to examine relationships between the two dimensions of family type, the three basic needs of SDT, the two factors of goal orientations and PA.

CHAPTER IV

RESULTS

Participant Demographics

There were 172 participants in total (111 females, 61 males). Participants were between the ages of 18 and 36 years of age ($M= 22.41$, $SD= 4.15$). Three of the participants reported that they were neither American nor Turkish; the data of these 3 students were not included in the results thus resulting in a final sample size of 169.

Scale Reliability

Measures of internal consistency were obtained for each subscale of Self in Family Scale, Basic Psychological Needs in Exercise Scale and Task and Ego Orientation in Sport Questionnaire. All subscales showed acceptable levels of reliability for the sample. Cronbach alphas were as follows: self in family scale: Autonomy ($\alpha = .62$), Relatedness ($\alpha = .89$); subscales of Basic Psychological needs in Exercise scale: Autonomy ($\alpha = .79$), Competence ($\alpha = .82$), and Relatedness ($\alpha = .86$); subscales of Task and Ego Orientation in Sport Questionnaire: Task ($\alpha = .81$), Ego ($\alpha = .87$)

Family type as identified using the descriptions of family and relative to country are displayed in Table 2. Family type as identified by plotting each participant's autonomy and relatedness scores from the self in family questionnaire and relative to each country is illustrated in Figure 3. Evidence from both suggests that students from America were not exclusively in the independent family model and that students from

Turkey were not exclusively in the psychologically interdependent model. Thus, all subsequent hypotheses were tested relative to country instead of relative to family model as originally proposed.

Table 2

Family description and nationality

Variable	Family type		
	Independent	Interdependent	Psycho-Interdependent
American	30	0	46
Turkish	5	1	86

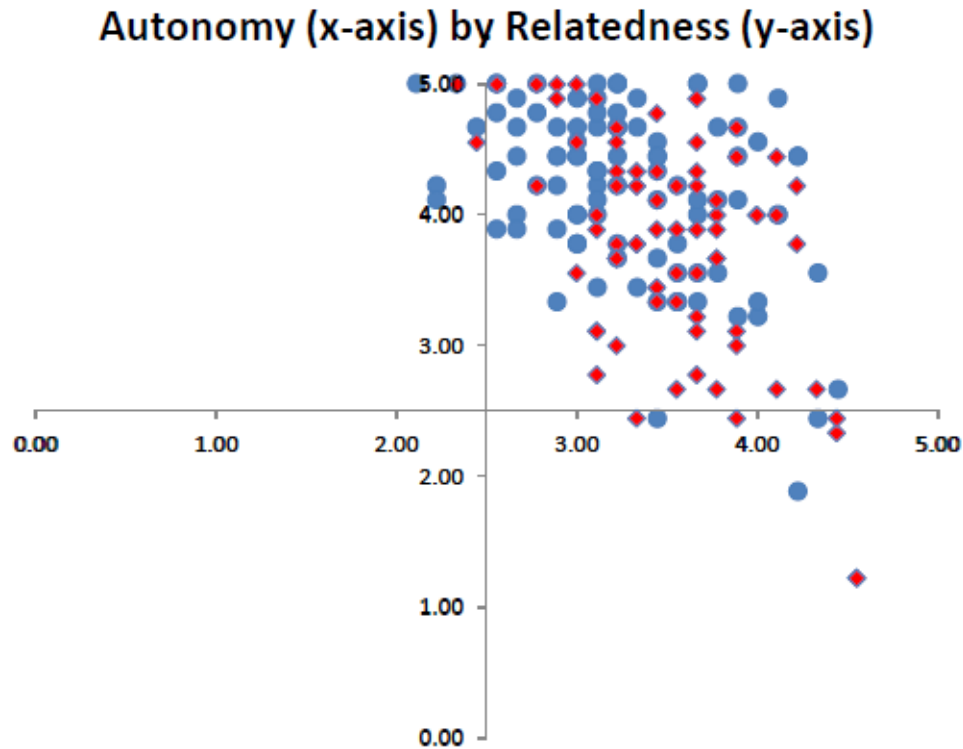


Figure 3. Family type distribution according to quadrants

Note: Red diamonds represent American students and blue dots represent Turkish students.

Family type differences across cultures

American students ($M = 3.51$) were significantly higher in autonomy on the family interaction scale than Turkish students ($M = 3.28$), with $F(1, 166) = 9.14, p < .05$. On the other hand, Turkish students ($M = 4.20$) were significantly higher in relatedness than American students ($M = 3.78$), with $F(1, 166) = 13.13, p < .05$. However, scores for the vast majority of the students placed them in the interdependent family which was counter to the expectations for the differences in family interactions.

Table 3

Descriptive statistics for family type difference between American and Turkish Students

Variable	N	Autonomy M (SD)	Relatedness M (SD)
American	76	3.52 (0.47)	3.79 (0.83)
Turkish	92	3.28 (0.53)	4.20 (0.66)
Range (Min-Max)		2.11-4.56	1.22-5.00

Goal orientation differences across cultures

There was not a significant difference between American students ($M= 3.11$) and Turkish students ($M= 3.27$) in terms of ego-orientation, $F(1, 166) = 1.41, p>.05$.

However there was a significant difference between American students ($M= 4.32$) and Turkish students ($M= 4.01$) in terms of task orientation, $F(1, 166) = 13.43, p<.05$.

Table 4

Descriptive statistics for Ego and Task Orientations

Variable	N	Ego Orientation	Task Orientation
		M (SD)	M (SD)
American	76	3.12 (0.90)	4.33 (0.46)
Turkish	92	3.28 (0.83)	4.02 (0.61)
Range (Min-Max)		1.17-5.00	2.29-5.00

Basic needs of SDT across cultures

There was a significant difference between American students ($M=3.82$) and Turkish students ($M=3.50$) in terms of autonomy, $F(1,166) = 6.35, p<.05$. However there

were no significant differences between the two groups in terms of competence, $F(1,166) = 0.77, p > .05$ and relatedness, $F(1,166) = 0.14, p > .05$.

Table 5

Basic needs in SDT

Variable	N	Autonomy	Competence	Relatedness
		M (SD)	M (SD)	M (SD)
American	76	3.82 (0.78)	3.53 (0.95)	3.55 (0.98)
Turkish	92	3.50 (0.83)	3.40 (0.88)	3.61 (0.95)
Range (Min-Max)		1-5	1-5	1-5

Culture and PA Level

Results showed that American students ($M=46.74, SD=24.37$) were significantly more active than Turkish students ($M= 28.76, SD= 20.05$), $t(165) = 5.23, p < .05$. Results showed that American students ($M= 44.78, SD=27.7$) were still significantly more active than Turkish students ($M=29.05, SD=20.1$), $t(132) = 4.46, p < .05$, even when students majoring in kinesiology were excluded from the sample

Table 6

PA levels of American and Turkish students

Variable	N	Physical Activity
		M (SD)
American	76	46.74 (24.37)
Turkish	91	28.76 (20.05)

Correlations between Measures

Correlations between measures are presented in Table 5. The autonomy and relatedness dimensions of family type were significantly negatively related. The autonomy dimension of family type is negatively correlated with the relatedness need of SDT. Also, the relatedness dimension of family type is positively correlated with both competence and relatedness needs of SDT. Analyses revealed a significant positive correlation between task orientation and PA level. With regards to the SDT needs, Pearson correlation revealed a significant positive correlation between autonomy and PA and between competence and PA.

Table 7

Pearson correlations between surveys

	Family type		SDT		PA		Goal Orientation	
	Autoself	Relatedself	Autonomy	Competence	Relatedness	Godin	Ego Orientation	Task Orientation
Autoself	1	-.495**	-.078	-.128	-.277**	.134	.003	.000
Relatedself		1	.148	.203**	.434**	-.251**	-.132	.095
Autonomy			1	.739**	.521**	.311**	.132	.236**
Competence				1	.501**	.416**	.068	.166*
Relatedness					1	.146	.066	.190*
Godin						1	.057	.246**
Ego Orientation							1	-.001
Task Orientation								1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

CHAPTER V

DISCUSSION

Research in sport psychology has indicated that motivation is an essential factor for physical activity (Gill & Williams, 2008; Hayashi 1996). It has also shown that culture can be an important variable that can affect motivation in terms of personal and situational factors (Hayashi, 1996; Kim & Gill, 1997; Taylor & Lonsdale, 2010). Based upon these findings, the main objective of this study was to explore the effects of cultural differences on motivation in physical activity settings. Despite its importance, cultural diversity is rarely examined in a sport and exercise psychology context (Gill, 2007). So, the aim of the study was to draw attention to the potential influence of culture on physical activity behavior and to relate family interaction models relative to individualism and collectivism to a sport and exercise psychology context. As there are limited numbers of cross-cultural studies in the field of sport psychology, a cross sectional design comparing individualistic (United States) and collectivistic (Turkey) countries was used to enhance our understanding about motivational patterns and PA as a function of culture.

Relative to Figure 2 the results demonstrate that the average scores for relatedness and autonomy for students from Turkey and from America are located in the quadrant that has been described as indicative of the psychologically interdependent family type. However, it was expected that Americans would be in the interdependent family

quadrant. One of the logical reasons for this finding might be related to the current economic problems in the world. Given that the majority of the samples were undergraduate students and today's current economy, adult children today might need to depend on their parents longer than they have in the past and this might influence the relatedness scores.

Another possible explanation might be related to changes in parenting behavior. The effects of emerging lifestyles related to globalization, technological development such as the Internet, and resource accessibility might also affect parenting behavior. Parents have numerous resources available now, such as access to recent research, exposure to the media, and access to training, workshops, and books that were not available to parents in the past. This shift in life conditions might have helped parents integrate autonomy, warmth, and control simultaneously in child rearing. In this sense, as Kagitcibasi (2009) indicated, there might be a convergence towards a family type of psychological interdependence throughout the world. Kagitcibasi (2009) also explains that autonomy and relatedness are two separate dimensions and that they may coexist. So, findings also support previous research and demonstrate that autonomy is not experienced at the expense of relatedness.

Given that country and family type were not related as expected, analyses focused on differences between the two countries. ANOVA revealed that there were cultural differences in the two dimensions of family interaction type (autonomy and relatedness). American students were higher in autonomy and lower in relatedness in comparison to Turkish students. This was an expected finding given the nature of individualistic and

collectivistic countries and an expectation that the United States is representative of an individualistic country while Turkey is representative of a collectivistic country.

Although there were significant differences between American and Turkish students in terms of relatedness, Americans reported high levels of relatedness ($M=3.7$). This finding was not consistent with the theory of the independent family model of western countries. According to the independent family model, people from countries like the United States should view their self as separated from family members and autonomous (Fredericks & Eccles, 2005; Kagitcibasi, 2005).

The psychologically interdependent family model is also in accord with the basic psychological need of SDT theory. SDT theory also stresses the importance of experiencing autonomy and relatedness together (Hagger & Chatzisarantis, 2008). So, it might be interesting to further investigate the convergence towards this family model as expressed by measures from SDT.

It was also hypothesized that students from United States and Turkey would differ on basic needs of SDT in exercise: autonomy, relatedness, and competence. Results indicated that there was only a significant difference between the two groups in terms of autonomy in a way that Americans were higher than Turkish students. This was an expected finding as autonomy is an important component of individualistic countries such as the United States. Students did not differ significantly in terms of relatedness and competence of SDT in exercise. A potential reason of not finding a significant difference in relatedness might be that college students participate in PA with their friends. Relatedness items in the BPNES survey were mainly asking about people who you are

involved with during exercise (e.g. “My relationships with the people I exercise with are close” and “I feel I have excellent communication with the people I exercise with”). Students might have responded to these questions according to their relationships with their friends. The results might have been different if the target population were not college students. Even though there were significant differences in terms of autonomy between groups, it is also important to notice that all the mean scores of the three constructs of SDT were actually high (3.5 or higher). This finding shows us that college students regardless of nationality experience these basic needs simultaneously as SDT recommends.

ANOVA results of the two goal orientations of the task and ego orientation in Sport Questionnaire partially supported expectations. The results for ego orientation failed to support expectations as there were no significant differences between American and Turkish students in terms of ego orientation. This was an unexpected finding as it was hypothesized that Americans would be more ego-oriented in PA participation than Turkish students. A logical explanation of this result might be the nature of PA itself as it is not competitive like sports. Winning is not the primary goal in physical activity. So, this might have affected the results in a way that there were not significant differences in ego orientation scores between American and Turkish students. Results might have been different if sport settings were considered rather than PA. Another potential explanation might be that TEOSQ was modified for use in this study to assess ego orientations relative to physical activity instead of sport. This might have affected the results. Semi-structured interviews were conducted in previous research regarding goal orientations in

PA (Hayashi, 1996). However, in the current study, the researcher used a likert scale survey. So, TEOSQ might not have been accurate at measuring goal orientations in PA as it is in measuring goal orientations in sports. On the other hand there were significant differences between American and Turkish students in terms of task orientation. Although Americans ($M=4.32$) and Turkish ($M=4.01$) groups reported high scores on task, American students were higher in task than Turkish students. This was an unexpected finding as Turkish students were expected to be more task-oriented. As mentioned earlier, findings might have been different if sport settings were considered instead of PA settings. Another possible explanation might be PA level; Americans reported significantly higher PA levels than Turkish students (Table 5).

It was hypothesized that physical activity levels would differ as a function of nationality. Americans students were more active than Turkish students. A potential reason for this difference might be the sample itself from the United States. Kinesiology students participated to this study while there were not any kinesiology students in the Turkish sample as the field is non-existent in Turkey. Thirty five out of 80 American participants were Kinesiology students. Another potential explanation can be logistics. There are more recreational options in the United States such as avenues and facilities to be physically active compared to Turkey. Facilities and recreational parks may encourage students to be more physically active in United States.

One of the purposes of the study was to investigate factors that may affect physical activity levels of college students across cultures. The relationship between

autonomy, relatedness, and competence of SDT and task and ego orientations were analyzed with correlations across American and Turkish students.

The researcher was interested to see if goal orientation type would predict physical activity levels. There was a significant correlation between task and PA level. This finding was in line with previous research and theories where it was stated that higher levels of task would lead to higher levels of PA (Hayashi, 1996).

It was also hypothesized that basic needs of SDT would predict PA levels. Significant positive correlations were found between autonomy and competence and PA levels. However it was unexpected to see that there was no significant relationship between relatedness and PA level. This was not consistent with SDT theory, which states that three basic needs should be experienced simultaneously. However all three basic needs of SDT were significantly correlated with task orientation which may suggest that experiencing the three basic needs will contribute to PA participation indirectly through the relationship with task orientation.

Before discussing future directions, it is important to acknowledge the limitations of this study. First, there are measurement issues that might have influenced the results. The task and ego orientation in sports questionnaire (TEOSQ) was not specifically designed for PA purposes. The questionnaire was developed for investigating sport participation and it was adjusted for this study. Changes involved simply replacing the word “sport” by “physical activity”. Second, a potential limitation with the current sample was that American students came from the University of North Carolina at Greensboro. Greensboro is the third biggest city of the state North Carolina and a

relatively small city in the United States with a population of 750,000. In contrast, Istanbul is the biggest city in Turkey and is a highly urbanized and industrialized metropolitan with a population of 18 million. The results may have been different if the American students came from a big city in the United States such as New York or Los Angeles. Another potential limitation is the potential differences between students who choose to attend the two institutions used in this study. UNCG is a public university whereas Koc University is private institution. The socioeconomic status might create discrepancies between two groups of students. In addition, academically, Koc University is one of the top ten universities of Turkey while UNCG is in the top two hundred universities in the United States. These discrepancies between institutions and students might have impacted the results. Lastly, all of the scales that were used in this study were scored on a five point likert scale. If a likert scale with a broader range of possible responses had been used such as 10 point scale, group differences might have been more obvious because participants would have a wider range of options.

Future Directions

Findings of this research indicate that there is a convergence towards a psychologically interdependent family model regardless of cultural patterns (individualism vs. collectivism). This finding suggests that college students in these two countries are not distinct as a function of family type interaction styles and those differences in countries cannot be linked to family models. So, future research should examine a more homogenous population. For example, another path for future research

might be investigating individuals who live in the same country but who express differences in their family model to see how family model itself predicts PA.

The nature of PA is not competitive; PA mainly involves fun, learning and improving skills. This might have been the main reason of similarities of scores between two groups. It would be interesting to look at the same constructs among collegiate athletes or in another sport setting that is competitive rather than a PA setting.

Another possible direction for future research would be to measure the effects of cultural differences on motivation by asking some open ended questions rather than only having forced likert-scale questions. Some questions might ask about opportunities offered for them in terms of PA, support they receive from their families or barriers that students face with regards to PA. Having a mixed design might be important to get details about cultural differences between two groups. A mixed design that combines quantitative and qualitative data might generate new findings on this topic.

An additional way that future research could investigate cultural differences would be to do a comparison between Turkish and American students in the United States. In this way, both groups would be offered similar opportunities with similar avenues, as they will be under the same educational system. Recreational facilities and opportunities might have a significant impact on PA level that might change the results. It would be also interesting to compare Turkish and American students in Turkey to compare the differences between two groups.

Future research could also use longitudinal studies and could look at autonomy and relatedness in family interaction type over a time with a given sample and see how

these constructs change between the two nationalities. This sample mostly involved undergraduate students and they still might be dependent on their families, this might have been the reason for the similarly high relatedness scores in the two groups. It might be interesting to see how autonomy and relatedness scores change over a period time between two cultures

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APPENDIX A
BACKGROUND QUESTIONNAIRE

Age: _____

Sex: Male__ Female__

Nationality: American _____
Turkish _____
Other _____ (please indicate) _____

Race/Ethnicity

White / Caucasian _____
Black / African American _____
Native American _____
Asian / Pacific Islander _____
Hispanic / Latina/o _____
Other / Mixes _____ (please indicate) _____

Education: Undergraduate student: 1st year__ 2nd year__ 3rd year__ 4th year__

Graduate student (masters): 1st year__ 2nd year__

APPENDIX B

FAMILY DESCRIPTION QUESTIONNAIRE

In answering the questions in this survey, please consider a family to refer to the family that you grew up with (for some people, this might be one or more parents and siblings, but for others this may be grandparents or other caregivers).

Please check the description that best describes your family interactions

☐ I prefer to keep a certain distance in my relationship with my family. I make my own decisions and plans.

☐ I feel very closely attached to my family. I believe that people should receive approval from their families for their future plans and decisions.

☐ I am close to my family. I make my own decisions and ask my family their opinions. I feel both independent and emotionally connected to my family

☐ I feel neglected by my family. My family makes decisions for me and I feel that I should accept these decisions

APPENDIX C

SELF IN FAMILY SCALE

The following sentences refer to you and your interaction style with your family. Using the 1-5 scale below, please indicate the extent to which you agree with these statements by circling one number for each statement.

	I don't agree at all	I agree a little bit	I somewhat agree	I agree a lot	I completely agree
1. I feel independent of my family	1	2	3	4	5
2. I usually try to agree with the wishes of my family	1	2	3	4	5
3. I do not have to think the way my family does	1	2	3	4	5
4. I prefer to keep a certain distance in my relationship with my family.	1	2	3	4	5
5. During hard times, I would like to know that my family will be with me.	1	2	3	4	5
6. The time that I spend with my family is not important for me.	1	2	3	4	5
7. People should receive approval from their families for their future plans.	1	2	3	4	5
8. Avoid making decisions with which my family would not agree.	1	2	3	4	5
9. On personal issues, I accept the decisions of my family.	1	2	3	4	5
10. Feeling very close to the family is a good thing.	1	2	3	4	5
11. My family is my top priority	1	2	3	4	5
12. I feel myself closely attached to my family	1	2	3	4	5
13. I would not be close to someone whom my family does not agree.	1	2	3	4	5
14. Independent of my family, I cannot make my decisions easily.	1	2	3	4	5
15. I can easily change my decisions according to the wishes of my family.	1	2	3	4	5
16. My relationship with my family makes me feel peaceful and secure.	1	2	3	4	5
17. I am very close with my family	1	2	3	4	5
18. I don't enjoy spending much time	1	2	3	4	5

APPENDIX D

BASIC PSYCHOLOGICAL NEEDS IN EXERCISE SCALE

The following sentences refer to your overall experiences in exercise as opposed to any particular situation. Using the 1-5 scale below, please indicate the extent to which you agree with these statements by circling one number for each statement.

	I don't agree at all	I agree a little bit	I somewhat agree	I agree a lot	I completely agree
1. I feel I have made a lot of progress in relation to the goal I want to achieve	1	2	3	4	5
2. The way I exercise is in agreement with my choices and interests.	1	2	3	4	5
3. I feel I perform successfully the activities of my exercise program.	1	2	3	4	5
4. My relationships with the people I exercise with are very friendly.	1	2	3	4	5
5. I feel that the way I exercise is the way I want to.	1	2	3	4	5
6. I feel exercise is an activity, which I do very well.	1	2	3	4	5
7. I feel I have excellent communication with the people I exercise with.	1	2	3	4	5
8. I feel that the way I exercise is a true expression of who I am.	1	2	3	4	5
9. I am able to meet the requirements of my exercise program.	1	2	3	4	5
10. My relationships with the people I exercise with are close.	1	2	3	4	5
11. I feel that I have the opportunity to make choices with regard to the way I exercise	1	2	3	4	5

APPENDIX E

GODIN LEISURE TIME SCALE

Considering a **7-Day period** (a week), how many times on the average do you do the following kinds of exercise for **more than 15 minutes** during your **free time** (write on each line the appropriate number).

Times Per Week

a) STRENUOUS EXERCISE

(HEART BEATS RAPIDLY)

(e.g., running, soccer, basketball, judo, racquetball
skating, vigorous swimming, vigorous long distance biking)

Times Per Week

b) MODERATE EXERCISE

(NOT EXHAUSTING)

(e.g., fast walking, tennis, easy biking,
volleyball, badminton, easy swimming, dancing)

Times Per Week

c) MILD EXERCISE

(MINIMAL EFFORT)

(e.g., yoga, archery, fishing, bowling,
golf, easy walk)

APPENDIX F

TASK AND EGO ORIENTATION QUESTIONNAIRE

Consider the statement "I feel most successful in physical activity when..." and read each of the questions on the questionnaire below. Using the 1-5 scale below, please indicate the extent to which you agree with these statements by circling one number for each statement.

I feel most successful in physical activity when...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1) I am the only one who can do the play or skill	1	2	3	4	5
2) I learn a new skill and it makes me want to practice more	1	2	3	4	5
3) I can do better than my friends	1	2	3	4	5
4) The others cannot do as well as me	1	2	3	4	5
5) I learn something that is fun to do	1	2	3	4	5
6) Others mess up but I do not	1	2	3	4	5
7) I learn a new skill by trying hard	1	2	3	4	5
8) I work really hard	1	2	3	4	5
9) I score the most points/goals/hits, etc.	1	2	3	4	5
10) Something I learn makes me want to go practice more	1	2	3	4	5
11) I am the best	1	2	3	4	5
12) A skill I learn really feels right	1	2	3	4	5
13) I do my very best	1	2	3	4	5

This is the end of the questionnaire, thank you for participating.

APPENDIX G

SAMPLE CONTACT LETTER FOR FACULTY MEMBERS

To Whom It May Concern;

I am a graduate student studying sport and exercise psychology at the University of North Carolina at Greensboro. I am conducting a thesis as a formal part of my master's degree requirements. My study is a cross-cultural study examining different family interactions and physical activity motivation of American and Turkish college students ages 18 or older. The purpose of this study is to look at different family interactions to examine similarities or differences between American and Turkish student's physical activity motivation. This information may provide future researchers and sport psychology professionals greater insight into the effects of cultural differences on motivation so they can customize physical activity promotion according to the specific culture.

I am writing to request the participation of your students in my study. If you agree to allow your students to participate I will be in contact in order to set a date and time. The questionnaires will take approximately 15 minutes to complete. Following the completion of my study, I will provide you with a written summary of the findings upon request.

If you are interested in participating you can e-mail me at d_gurley@uncg.edu to set up a meeting time when I can distribute the surveys.

Thank you for your cooperation,

Duygu Gurleyik
KIN M.S. Candidate
Specializing in Sport and Exercise Psychology
The University of North Carolina at Greensboro
d_gurley@uncg.edu

APPENDIX H

SAMPE ORAL PRESENTATION

Oral presentation before the survey:

Hi, my name is Duygu Gurleyik, I am a master's student at University of North Carolina at Greensboro and I am conducting a research for my Master's Thesis. The goal of this survey is to look at different family interactions to examine similarities or differences between American and Turkish student's physical activity motivation. You are no way required by the class or myself to participate in this research. There is no right or wrong answer. The survey will be anonymous and all answers will be kept confidential. Please let me know if you have any questions, I will be happy to help you. The survey will take you approximately 15 minutes but take as much time as you need. Thank you

APPENDIX I

INFORMED CONSENT FORM

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

CONSENT TO ACT AS A HUMAN PARTICIPANT: LONG FORM

Project Title: The effects of cultural differences on motivation in physical activity settings

Project Director: Dr. Jennifer Etnier

Participant's Name: _____

What is the study about?

This is a research project. This aim of the study is to understand how cultural and family interaction differences affect motivation in physical activity settings. The study will compare motivational differences between American and Turkish college students.

Why are you asking me?

We are looking for college students who are 18 years or older. Those who are under 18 years of age are not eligible for participation

What will you ask me to do if I agree to be in the study?

I will ask you to fill out questionnaires that include questions about you, your family interactions, and your physical activity. This is expected to take no longer than 15 minutes. No physical, psychological, or emotional stress is expected to result from participation in this research.

What are the dangers to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.

If you have any concerns about your rights, how you are being treated or if you have questions, want more information or have suggestions, please contact Eric Allen in the Office of Research Compliance at UNCG toll-free at (855)-251-2351.

Questions about this project or benefits or risks associated with being in this study can be answered by Duygu Gurleyik who may be contacted at (919) 995-0847 or (532) 676 1584 or d_gurley@uncg.edu

Are there any benefits to society as a result of me taking part in this research?

There may be benefits to society such as furthering our understanding of how culture impacts motivation and potentially informing researchers and professionals as to how to

effectively promote physical activity.

Are there any benefits to *me* for taking part in this research study?

There are no benefits to you as a result of participation in this research study

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you, nor will payments be made to you as a result of participation in this study.

How will you keep my information confidential?

Consent forms will kept separately from all other data collected and will be kept in a locked file cabinet, in a locked lab, in the Health and Human Performance Building at UNC Greensboro. Your questionnaire data does not include any identifying information. "All information obtained in this study is strictly confidential unless disclosure is required by law."

What if I want to leave the study?

You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

What about new information/changes in the study?

If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:

By signing this consent form you are agreeing that you read, or it has been read to you, and you fully understand the contents of this document and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. By signing this form, you are agreeing that you are 18 years of age or older and are agreeing to participate, or have the individual specified above as a participant participate, in this study described to you by Duygu Gurleyik.

Signature: _____ Date: _____